KENTUCKY WEEKLY CROP & WEATHER REPORT

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Prepared in Cooperation with:
Univ. of Ky - Agr'l Weather Center
U.S. Dept. of Commerce - NOAA
Kentucky Department of Agriculture
Cooperative Extension Service

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AGRICULTURAL NEWS: Spring like temperatures occurred last week while rainfall continued below normal. Much needed rain occurred over most of the State but more rain is generally needed. The eastern half of Kentucky was rated short to adequate while the rest of the State was rated adequate. Within these soil moisture groupings some localities continue to be dry while others have a surplus of topsoil moisture. **Topsoil moisture** for the State as of Friday, May 19 was rated 10 percent very short, 27 percent short, 59 percent adequate and 4 percent surplus. **Subsoil moisture** was rated 7 percent very short, 27 percent short, 64 percent adequate and 2 percent surplus. **Days suitable for fieldwork** averaged 5.0 days out of a possible 6. Farmers were busy in their fields setting both burley and dark tobacco, planting corn and soybeans, harvesting hay and applying pesticides where needed.

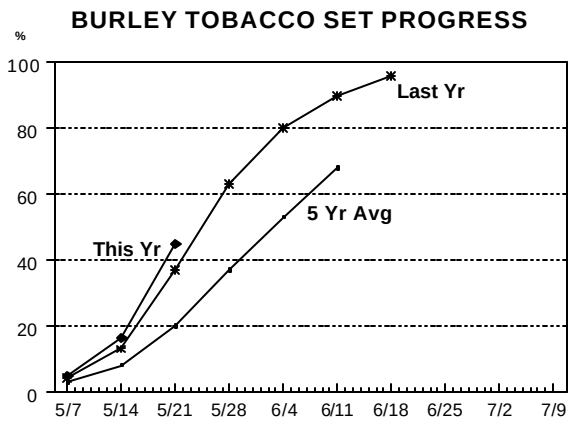
TOBACCO: As of Sunday, May 21, 45 percent of the intended **burley** acreage was set. This compares to 37 percent last year and 20 percent for the five year average. Farmers had also set 46 percent of their **dark tobacco**, also ahead of last year and average. Tobacco setting continues at a rapid pace. Set tobacco is starting to show good growth. In Bourbon County 200 plus acres of burley were seriously damaged by hail. Some flea beetles and cut worms have been reported in set tobacco. To date no disease problems have been reported. Condition of the set tobacco as of Friday was 1 percent very poor, 2 percent poor, 24 percent fair, 61 percent good and 12 percent excellent.

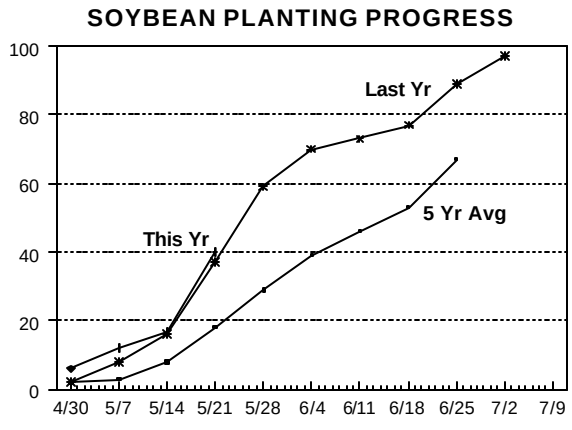
CORN: Corn planting nears completion with 93 percent of the intended acreage planted on Sunday. This compared to 94 percent last year and 76 percent for average. Generally favorable weather enabled farmers to plant their corn at a fast pace this year. About 84 percent of the intended acreage has emerged. This compares to 82 percent last year and 67 percent for average. Reporters commented on the presence of army worms in corn fields, especially no-till corn acreage. Some fields have been destroyed while farmers are spraying others. Fields are being replanted due to army worm damage and poor germination. Some farmers are side-dressing their corn. As of Friday, May 19 emerged corn was rated 3 percent poor, 17 percent fair, 61 percent good and 19 percent excellent. The average height of emerged corn is 8 inches while the most advanced corn was over 13 inches tall.

SOYBEANS: Farmers are picking up their planting of single crop soybeans as corn planting is nearing completion. As of Sunday, 40 percent of the intended acreage had been planted, ahead of 37 percent last year and 18 percent for average. Of the intended planted acreage 21 percent of the soybeans had emerged.

SMALL GRAINS: The **winter wheat** crop continues to be promising but lodging has occurred to various degrees. Wheat intended for hay is being cut and baled. The earliest wheat harvest is expected to begin about June 14. Condition of the wheat crop was rated 2 percent very poor, 5 percent poor, 15 percent fair, 52 percent good and 26 percent excellent. Harvesting of the barley crop is expected to begin about June 6.

OTHER CROPS: Farmers are harvesting a good first cutting of **alfalfa** hay. Some alfalfa weevil damage has been reported. Condition of the hay crop was rated 2 percent very poor, 7 percent poor, 28 percent fair, 51 percent good and 12 percent excellent. **Pastures** continue to provide grazing and were rated 2 percent very poor, 8 percent poor, 29 percent fair, 51 percent good and 10 percent excellent. Farmers are concerned about the lack of moisture for newly seeded pastures. **Grain sorghum** was 45 percent planted.





KENTUCKY CROP PROGRESS
WEEK ENDING MAY 21, 2000
WITH COMPARISONS

Crop Stage	This Week	Previous Year	5-Yr. Avg.	Previous Week KY	Previous Week U.S.
	Percentage				
Corn					
Planted	93	94	76	87	91
Emerged	84	82	67	68	67
Soybeans					
Planted	40	37	18	17	57
Emerged	21	19	5	4	23
Burley Tobacco Set	45	37	20	16	NA
Dark Tobacco Set	46	42	23	16	NA

(NA) Data Not Available.

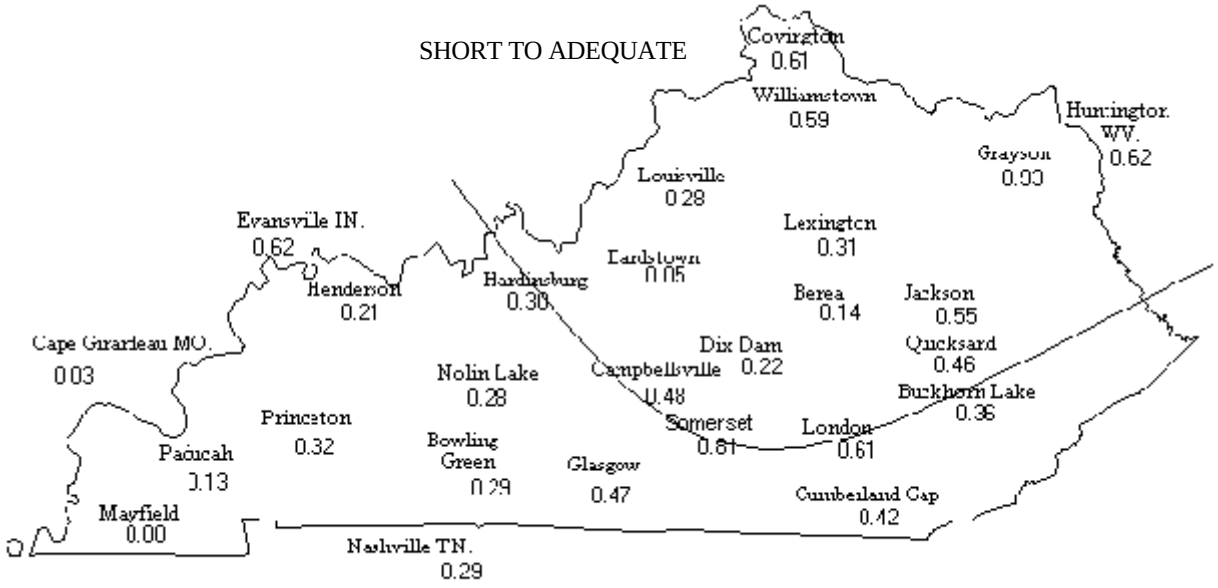
SOIL MOISTURE
WEEK ENDING MAY 19, 2000
WITH COMPARISONS

	This Week	Previous Week
	Percentage	
TOPSOIL		
Very Short	10	4
Short	27	25
Adequate	59	65
Surplus	4	6
SUBSOIL		
Very Short	7	2
Short	27	27
Adequate	64	67
Surplus	2	4

KENTUCKY CROP CONDITIONS (Percent)

CROP	WEEK ENDING MAY 19, 2000 VERY POOR	POOR	FAIR	GOOD	EXCEL-LENT	WEEK ENDING MAY 12, 2000 VERY POOR	POOR	FAIR	GOOD	EXCEL LENT
Corn Emerged	0	3	17	61	19	0	4	25	53	18
Wheat	2	5	15	52	26	1	5	23	53	18
Pasture	2	8	29	51	10	1	5	25	55	14
Hay Crops	2	7	28	51	12	1	4	33	51	11
Tobacco Set	1	2	24	61	12	0	3	25	58	14

PRECIPITATION MAP FOR WEEK ENDING SUNDAY, MAY 21, 7:00 P.M.
TOPSOIL MOISTURE DELINEATION FOR WEEK ENDING FRIDAY, MAY 19, 2000



KENTUCKY WEATHER SUMMARY, MAY 15 - 21, 2000:

SLIGHTLY BELOW NORMAL TEMPERATURES AND BELOW NORMAL RAINFALL:

More spring-like temperatures occurred throughout the week with high temperatures fluctuating from the mid 60s to the 80s. Much needed storms/rain finally occurred across most of Kentucky on Friday with a scattered rain event occurring earlier in the week for portions of the State.

Temperatures for the period averaged 66 degrees across the State which was 1 degree BELOW NORMAL. High temperatures averaged from 76 in the West to 76 in the East. Departure from normal high temperatures ranged from 5 degrees BELOW NORMAL in the West to NEAR NORMAL in the East. Low temperatures averaged from 56 degrees in the West to 55 degrees in the East. Departure from normal low temperature ranged from 1 degree BELOW NORMAL in the West to 1 degree BELOW NORMAL in the East. The Palmer Drought Index for May 13th showed the entire State in a MODERATE hydrological drought with the Crop Moisture Index continue to indicate that conditions were NEAR NORMAL for agricultural purposes across the State. Rainfall for the period totaled 0.39 inches Statewide which was 0.67 inches BELOW NORMAL. Rainfall totals by climate division, West 0.22 inches, Central 0.28 inches, Bluegrass 0.46 inches and East 0.59 inches, which was 0.89, 0.83, 0.56 and 0.41 inches BELOW NORMAL respectively. By station, precipitation totals ranged from a low of 0.00 inches at Mayfield to a high of 0.93 inches at Grayson.

Tom Priddy

KENTUCKY TEMPERATURES AND RAINFALL

FOR WEEK ENDING SUNDAY, MAY 21, 7:00 P.M.

Weather Station	Rainfall			Deviation From		Air Temperature				Growing Degree Days		
	Last Week	Since April 1	Last Four Wks	Norm Since Apr. 1	Norm Last 4 Wks	High	Low	Wkly. Avg.	Dev. From Norm	Last Week	Since Apr. 1	Dev. Since Apr. 1
	(Inches)					(Degrees Fahrenheit)						
Bardstown	0.05	5.58	1.19	-1.33	-2.74	85	42	65.6	-2	116	654	+39
Berea	0.14	5.48	2.10	-2.04	-2.15	86	41	65.3	-1	113	667	+31
Bowling Green	0.29	6.32	3.39	-1.35	-0.96	86	42	66.0	-1	117	639	+3
Bristol	0.47	4.10	1.60	-1.84	-1.81	89	38	65.8	-1	119	578	+14
Buckhorn Lake	0.36	7.03	3.37	+0.50	-0.29	88	43	65.4	-1	111	651	+87
Cape Girardeau	0.03	3.23	2.43	-4.72	-2.12	86	45	66.4	-3	116	643	-14
Campbellsville	0.48	6.28	2.38	-1.98	-2.24	87	41	67.0	-0	124	698	+62
Covington	0.61	7.19	2.77	+0.54	-1.00	79	41	63.6	-3	99	543	+9
Cumberland Gap	0.42	5.93	1.38	-1.41	-2.83	88	38	66.6	+0	125	696	+132
Dix Dam	0.22	5.74	1.69	-1.69	-2.51	86	42	65.1	-1	111	638	+23
Evansville	0.62	4.08	2.28	-3.16	-1.88	85	43	63.9	-6	103	592	-14
Glasgow	0.47	6.24	2.71	-1.74	-1.78	89	41	68.6	+1	134	745	+169
Grayson	0.93	5.93	1.99	-0.59	-1.74	82	41	64.5	-2	109	611	+98
Hardinsburg	0.30	5.18	2.24	-2.43	-2.06	85	45	65.7	-2	111	678	+42
Henderson	0.21	4.85	3.26	-2.49	-0.82	84	44	65.3	-4	111	678	+42
Huntington	0.62	5.25	1.32	-1.24	-2.41	80	40	64.4	-2	109	604	+40
Jackson	0.55	8.13	3.28	+1.00	-0.71	86	44	65.4	-1	111	613	+49
Lexington	0.31	6.59	1.65	-0.32	-2.28	86	43	64.5	-2	106	579	+45
London	0.61	6.23	2.41	-0.58	-1.39	88	40	65.7	-1	117	597	+33
Louisville	0.28	5.22	1.79	-2.14	-2.33	85	45	65.2	-2	109	628	+22
Mayfield	0.00	5.53	3.06	-2.91	-1.51	85	48	67.6	-2	123	658	-29
Nashville	0.29	7.56	4.51	-0.12	+0.18	88	47	69.0	+2	132	678	-9
Nolin Lake	0.28	5.94	2.73	-2.30	-2.04	87	43	66.1	-1	116	672	+57
Paducah	0.13	5.82	3.09	-2.54	-1.43	86	48	66.8	-3	117	656	-1
Princeton	0.32	7.83	4.40	-0.33	-0.08	85	45	65.9	-4	114	756	+90
Quicksand	0.46	7.46	3.96	+0.33	-0.03	88	38	64.5	-2	110	664	+100
Somerset	0.81	7.45	2.84	-0.33	-1.61	87	40	67.4	+1	128	676	+61
Spindletop	0.90	5.92	1.92	-0.99	-2.01	86	44	64.3	-2	105	568	+34
Williamstown	0.59	7.15	2.68	+0.01	-1.28	82	42	65.9	-0	115	646	+112

The above information is provided by Tom Priddy, Kentucky Extension Agricultural Meteorologist, University of Kentucky Agr'l Weather Center (606)257-3000 ext 245. E-mail: tpriddy@ca.uky.edu Additional Ky weather data available on Internet at: http://wwwagwx.ca.uky.edu/

A GUIDE TO GROWING DEGREE DAYS

For the 2000 growing season, the Kentucky Agricultural Statistics Service in cooperation with the National Weather Service will provide weekly accumulated growing degree days (GDD) data.

These GDD are calculated according to the definition:

$$GDD + = \frac{\text{Daily Max (\# 86E F) + Daily Min (\$ 50EF)}}{2} \text{ - 50EF}$$

Maximum temperatures above 86EF are entered as 86E and minima below 50E are entered as 50E. This modification is designed to take into account the differing response of plants to quite high or quite low temperatures. There are several methods of calculating GDD, but the above formula is most widely accepted. This adjusted 50EF method of calculating GDD has been adopted by the Hybrid Seed Corn Industry as a basis for a uniform maturity rating system.

At 50EF corn grows hardly at all. As the temperature rises up to the range of 80E to 86EF, corn grows faster if moisture is adequate. When the temperature rises above 86EF the roots have increasing difficulty taking in water fast enough to keep plant cells turgid (full of water) and working at top speed. When soil moisture is short, the optimum temperature is less than 80EF. With perfect moisture supply the optimum temperature is likely 90E to 95EF.

The concept of growing degree days is still under study and refinement. In its short existence growing degree days has proven to be a much better gauge for rating corn maturity than the old "days of maturity" rating. The use and importance of GDD will improve as information is collected over the years.

Corn Percent Planted Week Ending May 14, 2000

State	May 14 2000	Prev Week	Prev Year	5-Yr Avg
CO	72	46	45	64
IL	98	91	72	61
IN	86	66	81	49
IA	99	95	78	72
KS	92	86	66	73
KY	**87**	**75**	**86**	**62**
MI	61	35	63	46
MN	96	93	85	73
MO	98	96	48	60
NE	94	79	58	65
NC	93	87	89	91
ND	72	55	33	31
OH	87	44	87	51
PA	54	28	58	42
SD	82	63	28	34
TN	90	81	95	89
TX	95	89	89	92
WI	87	62	67	53
ALL	91	78	70	62

These 18 States planted 92% of last year's corn acreage.

Soybean Percent Planted Week Ending May 14, 2000

State	May 14 2000	Prev Week	Prev Year	5-Yr Avg.
AR	23	16	18	19
IL	67	36	21	17
IN	57	29	45	23
IA	84	56	16	21
KS	46	26	10	14
KY	**17**	**12**	**16**	**8**
LA	59	41	40	43
MI	26	10	27	14
MN	76	54	23	28
MS	60	47	57	52
MO	55	41	9	10
NE	59	26	9	15
NC	14	5	13	14
ND	35	12	1	6
OH	54	19	65	27
SD	36	18	5	8
TN	10	4	10	7
WI	50	22	19	15
ALL	57	34	23	19

These 18 States planted 95% of last year's soybean acreage.

This release and others can be viewed on the Internet at **http://www.nass.usda.gov/ky/** For a free E-Mail subscription of the Kentucky Weekly Crop & Weather report, send an E-Mail message to **nass-state-releases@news.usda.gov** with the following command in the body of the message: **subscribe ky-crop-weather <e-mail address>.** The E-Mail address is optional; leave the address blank unless subscribing for someone else. The default address is where you sent the message from. You would unsubscribe in a similar way but use the word unsubscribe.

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